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Do the IMF and the World Bank influence voting in the UN General Assembly?

Axel Dreher · Jan-Egbert Sturm

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Abstract Using panel data for 188 countries over the 1970–2008 period, this paper analyzes empirically the influence of the IMF and the World Bank on voting patterns in the UN General Assembly. Countries receiving adjustment projects and larger non-concessional loans from the World Bank vote more frequently in line with the average G7 country. The same is true for countries obtaining non-concessional IMF programs. Regarding voting coincidence with the United States, World Bank non-concessional loans have a significant impact, while IMF loans do not. This overall pattern of results is robust to the choice of control variables and method of estimation.

Keywords IMF · World Bank · UN General Assembly · Voting · Aid

JEL Classification F33

1 Introduction

Ever since their inception, the International Monetary Fund (IMF) and the World Bank have been accused of being a tool of their major shareholders, and especially the United States.[1]

[1] See Steinwand and Stone (2008) and Moser and Sturm (2010) for recent surveys.

A. Dreher (✉)
University of Goettingen, Platz der Goettinger Sieben 3, 37073 Goettingen, Germany
e-mail: mail@axel-dreher.de

A. Dreher · J.-E. Sturm
KOF Swiss Economic Institute, ETH Zurich, Weinbergstrasse 35, 8092 Zurich, Switzerland

A. Dreher
IZA, 53113 Bonn, Germany

A. Dreher · J.-E. Sturm
CESifo, 81679 Munich, Germany

J.-E. Sturm
e-mail: sturm@kof.ethz.ch

Woods (2003) clearly documents that the United States virtually controls major decisions at the IMF and the World Bank; Fratianni and Pattison (2005) summarize evidence showing that the G7 are in full control of the IMF on the big issues and that staff autonomy is restricted to areas of marginal interest to its shareholders. In the words of Rieffel (2003, pp. 28–29), "The IMF is an instrument of the G-7 countries. There is no example that comes easily to mind of a position taken by the IMF on any systematic issue without the tacit, if not explicit, support of the United States and the other G-7 countries." The recent empirical literature on political influences on the IMF shows that developing countries indeed get better terms from the IMF when they have closer ties with the United States, as measured by their voting behavior in the UN General Assembly (Thacker 1999; Stone 2002; Barro and Lee 2005; Dreher and Jensen 2007) or temporary membership in the United Nations Security Council (Dreher et al. 2009a). Similarly, the United States interferes with World Bank policies when its national interests are at stake (Gwin 1997). Consequently, Frey and Schneider (1986) find the distribution of Bank loans to be dominated by political considerations; Fleck and Kilby (2006) show that World Bank lending significantly reflects U.S. influence. According to Dreher et al. (2009b), temporary members of the UN Security Council receive significantly more projects than non-members, which the authors attribute to the influence of the Banks' major shareholders.

However, while there is ample evidence that the G7 countries to some extent control the flow of IMF and World Bank money, it has never been investigated whether the recipients of this money adapt their behavior to please the keepers of the funds. If IMF and World Bank money can be used to achieve certain outcomes in the Assembly, the results of voting would not necessarily reflect the interests of the majority of UN member states, but those of the most influential shareholders of the IMF and the World Bank. As this would substantially weaken the legitimacy of UN General Assembly (UNGA) decisions, this question is an important one. It is this question with which our paper deals. Specifically, we investigate empirically whether IMF and World Bank involvement increases the probability that a country votes in line with the G7 countries in the UN General Assembly.

The question addressed here is related to the literature on the impact of bilateral aid on UN General Assembly voting patterns (among others, see Wittkopf 1973; Kegley and Hook 1991; Lundborg 1998; Wang 1999; Dreher et al. 2008). Clearly, as compared to the Security Council, the power of the General Assembly is limited, and not all of its decisions are likely to be important for G7 countries. Still, there is ample evidence that G7 governments place some weight on the outcome of General Assembly votes. This is particularly true for the United States. As has been pointed out by the U.S. Department of State (1985), examining UN votes makes it possible "to make judgments about whose values and views are harmonious with our own, whose policies are consistently opposed to ours, and whose practices fall in between." A report from the same department (U.S. Department of State, 2000) states that "a country's behavior at the United Nations is always relevant to its bilateral relationship with the United States, a point the Secretary of State regularly makes in letters of instruction to new U.S. ambassadors" (quoted in Andersen et al. 2006). It has been argued that the "State Department … places high value on the employment of foreign aid to … swing critical votes in international bodies" (Black 1968, p. 19). Thacker (1999, p. 54) cites a memo to the director of the Food for Peace Program noting that "at critical moments in the world's recent history, the United States 'bought' votes subtly and indirectly to support its stand in the General Assembly." Bennis (1997) claims that "U.S. influence in (and often control of) the UN comes in the form of coercing the organization to take one or another position, or to reject some other position, or pressuring a country or countries to vote a certain way in the General Assembly." According to Eldar (2008), there is ample evidence on

vote trading in the General Assembly when it comes to elections of non-permanent members to the UN Security Council and elections of judges to the International Court of Justice.

Overall, there is reason to believe that aid is not only given to help countries in economic distress but to achieve the donor's political targets. In fact, since the late 1940s every U.S. administration considered foreign aid to be important in achieving foreign policy goals (Ruttan 1996). It has even been claimed that the primary purpose of U.S. economic assistance is in promoting overall U.S. policy objectives (Zimmermann 1993). According to (Morgenthau 1962, p. 302), "the transfer of money and services from one government to another performs here the function of a price paid for political services rendered or to be rendered."

In summary, G7 countries have some degree of influence over IMF and Bank decisions, and can thereby use the international organizations to bribe or reward recipient countries. Moreover, G7 countries place some weight on General Assembly votes and there is also evidence that certain states in the Assembly are susceptible to pressure (Keohane 1966). We therefore expect Fund and Bank involvement to influence voting patterns in the Assembly.

Our paper extends previous work on foreign aid and voting patterns in the UN General Assembly. It is the first analysis investigating whether G7 countries employ the IMF and the World Bank to change the voting behavior of developing countries (or reward countries for voting with them). To anticipate our main results, the IMF and World Bank indeed influence voting behavior in the Assembly. Overall, countries receiving adjustment projects and larger non-concessional loans from the World Bank vote more frequently in line with the average G7 country. The same is true for countries obtaining non-concessional IMF programs. Regarding voting coincidence with the United States, World Bank non-concessional loans have a significant robust impact, while the IMF has not. Arguably, a positive correlation between IMF and World Bank involvement is hardly surprising given the previous literature on political influences on these organizations. However, established results on the political control of these organizations do not imply that their loans are successful in buying votes in the General Assembly. To be confident that we identify the exogenous component of programs on voting we employ a GMM system estimator, accounting for the potential endogeneity of IMF and World Bank involvement. We also employ Extreme Bounds Analysis to test for the robustness of our results. The overall pattern is extremely robust to changes in the specification of the model and the method of estimation.

The organization of the paper is as follows. The next section presents our main hypothesis, while Sect. 3 introduces our hypotheses for the baseline model. Section 4 discusses methodological issues. In Sect. 5 we present the results of our analysis, while we discuss variations to our estimation approach in Sect. 6. The final section concludes.

2 Hypothesis and measurement of IMF and World Bank influence

There is ample evidence that G7 countries, and in particular the United States, exert pressure on governments to vote in line with them in the General Assembly. As outlined above, G7 countries can to some extent control IMF and World Bank decisions, and can thereby use the international organizations to influence recipient countries' behavior in ways compatible with their interests.

But even if the major shareholders of the IMF and the World Bank care about UNGA votes, why use the Fund and Bank to influence them? Why not simply rely on direct aid packages? We identify three types of benefits from indirect aid, which relate to political cover, leverage, and cost.

UN General Assembly votes are almost always traded behind the scenes because most countries prefer to conceal vote-trading arrangements to escape public condemnation (Eldar

2008). Using the IMF for political cover further obfuscates the process. As argued by Vaubel (1986, 2006), delegating "dirty work" to international organizations allows governments to escape nationalist resentment (also see Abbott and Snidal 1998). This holds for both donor and recipient countries.

An additional benefit of using the Fund and Bank is that leverage is explicitly built into the arrangement through conditionality. Recall that the organizations do not grant their loans fully upfront, and—in principle—continued disbursements are conditioned on economic policy changes. The Executive Boards of the IMF and the Bank, however, have the final word on all disbursements and have discretion in deeming countries compliant (Stone 2002, 2004). Many argue that the major shareholders exercise their power to pursue international political goals. While the Board certainly must contend with the International Financial Institutions' internal rules, and all studies of the determinants of IMF and World Bank lending show that economic variables to some extent guide their lending, a growing body of literature indicates that international politics matter as well.

Finally, costs are reduced. To put it bluntly, when they provide foreign aid through the IMF and the World Bank, the major shareholders pay a fraction of the cost (Eldar 2008). Arguably, there is a trade-off between employing one's own funds and using the IMF's and the Bank's money. On the one hand, U.S. policymakers may be able to influence international organizations almost as much as they can influence the flow of their own resources, as shown by McKeown (2009), who draws from recently declassified documents. According to one of the internal documents, the United States has not suffered major defeats when it has used its available resources for control and influence. On the other hand, transaction costs increase. In addition to negotiating with the (potential) recipients of the funds, the United States has to leverage its influence over the international organization and convince other major shareholders to agree. Thus, the Fund and Bank may be a less effective tool when the major shareholders disagree on a specific resolution (Copelovitch 2009). The relative efficiency of using them therefore depends on the perceived costs of achieving consensus among the major shareholders and the reduced costs of not needing one's own funds. Western countries might thus try to influence the Fund and Bank to reinforce the already existing bilateral pressure.[1] We hypothesize:

> More IMF and World Bank programs or loans increase the probability that a recipient country votes in line with the institutions' major shareholders, the G7 countries.

We explore this hypothesis by focusing on its several dimensions. First of all, we measure IMF and World Bank involvement in three different ways: The number of programs started, the amount of loans agreed and the amount of loans actually disbursed. Furthermore, we examine whether there are differences between concessional and non-concessional loans, or between IMF and World Bank loans and to what extent donor countries vary in their behavior. On top of that, we carry out various tests for robustness. Is the specification of the model an important issue here? How robust are the results for differences in measuring voting behavior? How does the end of the Cold War affect the outcomes?

With respect to the number of programs starting in a certain year, we distinguish the Structural Adjustment Facility (SAF) and Poverty Reduction and Growth Facility (PRGF), which are highly concessional, and the non-concessional Extended Fund Facility (EFF) and Stand-By Arrangement (SBA). Net concessional and non-concessional IMF loans agreed

[1] As one example, the United States promised China to support its loan request from the World Bank in exchange for support of a convention regarding deployment of armed forces in Iraq in the Security Council in 1991 (Eldar 2008).

and those actually disbursed are also included. Regarding the World Bank, we employ technical assistance, adjustment, and all other projects starting in a certain year.[2] Moreover, new net disbursements of concessional loans (International Development Agency, IDA) and non-concessional loans (International Bank for Reconstruction and Development, IBRD) in percent of GDP are included.

While we have no a priori hypothesis as to which loans and programs are more likely to be used to bribe recipients, there is good reason to separate these facilities in the empirical analysis instead of employing one overall variable for IMF and, respectively, World Bank involvement. Concessional loans are given to countries with low per capita income only, and frequently on a rather continuous basis. Non-concessional programs are usually negotiated with more developed countries, which might be better able to resist G7 pressure. In addition, those countries might put greater value on their stance in the General Assembly than the least developed countries do. However, IMF non-concessional loans in particular are frequently negotiated quickly at times of severe economic crises, so the recipient might well be forced to accept the political strings attached. Overall, whether it is non-concessional or rather concessional money that is used for vote buying is an empirical question.

Obviously, the institutional set-ups of the IMF and the World Bank differ substantially. We will explore whether these international organizations are vulnerable to being used for acquiring votes in the UN General Assembly. Access of the G7 countries to these organizations also differs. This especially holds for the United States. First, the United States is the largest contributor to the IDA, potentially giving it some leverage over the use of the funds (Gwin 1997). Second, the World Bank President has always been American, while the Fund's Managing Director has been European. A third difference discussed by Gwin is that the World Bank to some extent depends on U.S. capital markets to finance its operations and is required to obtain permission of the United States to borrow in its currency. Finally, the United States is the only country that carries out detailed reviews of every Bank loan proposal and the only one to maintain constant contact with the Bank through government officials in addition to its representative on the Board. This provides the United States with substantial influence as the Bank thereby pays closer attention to it than to any other major shareholder. While the United States also is the largest shareholder of the Fund, there is evidence that other major shareholders of the IMF might counterbalance U.S. influence when their interests diverge (e.g., Copelovitch 2009). Hence, it is quite plausible that the United States has more leverage over the Bank than the Fund.

3 Towards a baseline model

The previous literature offers competing accounts of the motives for voting in the UNGA. First, the issue of voting blocs and persistent lines of conflict has frequently been analyzed. Holcombe and Sobel (1996) identify voting blocs and their stability. Kim and Russett (1996), and Voeten (2000) analyze voting decisions using techniques such as factor analysis and Poole and Rosenthal's (1991, 1997) NOMINATE methodology. This approach uncovers both the underlying issue-dimensions and the voting preferences among UN member states. Potrafke (2009a) focuses on governments' ideology and reports that left-wing governments are on average less likely to be allied with the United States.

[2]Note that these categories comprise concessional and non-concessional projects alike.

A second well-researched question is whether voting is related to development aid. Stone (2002, 2004) shows that governments receiving more UN foreign aid receive lighter punishments for non-compliance with policy conditions under IMF programs. Kilby (2006) reports that voting alignment with Japan in the UN reduces funding by the Asian Development Bank in the first half of the sample investigated but increases funding more recently. According to Kilby (2009a), the World Bank enforces its structural adjustment conditions less rigorously in countries voting in line with the United States in the UNGA. Dreher et al. (2008) use disaggregated aid data to account for the fact that various forms of aid may differ in their ability to induce political support by recipients. They obtain evidence that U.S. general budget support and untied grants buy voting compliance in the UNGA.

In comparison with the numerous studies for other voting bodies (in particular, the U.S. Congress), these studies provide only selective evidence. At the national level, the relative importance of voting motives has been investigated in a number of studies. Rothenberg and Sanders (2000), Snyder and Groseclose (2000), Fleck and Kilby (2001, 2002), and Broz (2008, 2010) focus on the determinants of the individual voting decision, among many others. Using discrete choice techniques, a distinction can be made between different motives for voting, such as constituent interest, party affiliation, or personal ideology. Buying votes is also a theme in research on national elections (Dahlberg and Johansson 2002; Stratmann 1998). The benefit of voting for the preferred alternative stems from the enhanced chances that this alternative will be chosen as a voting outcome (Riker and Ordeshook 1968; Ledyard 1984). A well-known alternative is expressive voting (see Brennan and Hamlin 1998; Shieh and Pan 2010). It might be argued that the instrumental benefit in UNGA voting is zero, since resolutions are almost always adopted with sizeable majorities, such that the impact of any individual country's vote is negligible. Indeed, Boockmann and Dreher (2010) report limited evidence for instrumental voting at the UNGA, focusing on 13 000 individual voting decisions on human rights-related UNGA votes from 1980 to 2002.

Voting behavior is usually analyzed in the context of a principal-agent model, with the legislator being the agent, and the principals being the constituents supporting him. Monitoring the agent is costly, so that ideological shirking becomes possible (Kau and Rubin 1979; Peltzman 1984). In the context of foreign aid, aid can influence voting either because it affects the personal utility of the government (or a group of people close to the government) and/or because it affects the voters at large. For our purposes, a highly stylized representation of the underlying model should be sufficient (following the notation in McGuire and Ohsfeldt 1989). We assume that UNGA delegates' utility depends on their personal interests and the interests of the electorate.[3] Formally, delegate i from country j maximizes the utility function

$$\max U_{ij} = u(PE_i, PI_i, VE_j, VI_j), \tag{1}$$

subject to the constraints

$$VE_j = ve(PE_i, PI_i) \quad \text{and} \tag{2}$$

$$VI_j = vi(PE_i, PI_i). \tag{3}$$

The utility of voting (U_{ij}) depends on the delegates' personal economic interests (PE_i), their personal ideological interests (PI_i), future political support from satisfying voters' economic

[3]Note that we use the term "delegate" for expositional purposes only, representing the aggregated (appropriately weighted) national decision makers.

interests (VE_j) and, respectively, their ideological interests (VI_j). With each interest being a direct argument in the utility function, the vote will depend on the anticipated effect of the vote on each interest. It is assumed that the first derivatives of U_{ij} with respect to *PE*, *PI*, *VE*, and *VI* are positive. The constraints indicate that political support also depends on the amount of shirking (the partial derivatives of *VE* and *VI* with respect to *PE* and *PI* are assumed to be negative when personal and voter interests conflict, and zero when they coincide).

In the following, we derive our theory regarding what determines voting of delegates in the UNGA.

Hagan (1989) has pointed out that the political orientation of governments might be important for voting in the UN General Assembly. Socialist countries are probably likely to share similar views on a range of topics. The same is true for central or right-wing governments. This might hold both for the governments' ideology (*PI*) and the ideology of the voters at large (*VI*). The hypothesis draws from the public choice literature on the impact of government ideology on policy choice. Partisan theory suggests that left-wing governments implement more expansionary policies and intervene more heavily in the economy in general. Party ideologies have in particular been found to matter in policy fields without direct impact on the budget balance (e.g., Pitlik 2007; Bortolotti and Pinotti 2008) and might thus be important for voting in international organizations. Potrafke (2009a) uses indices for ideology developed in Bjørnskov (2005) and Potrafke (2009b) to test this hypothesis directly for the UNGA. According to his results, government ideology has indeed a strong influence on voting alignment with the United States.

In addition to political proximity, a similar culture might lead to similar voting behavior (for a discussion of the argument see Voeten 2000). Particularly, Thacker (1999) has pointed out that, as countries become more democratic, they may also alter their UN voting behavior to reflect these changes. Democracies rarely fight wars against each other (Doyle 1986) and probably have interests closer to the G7 countries than do dictatorships. They agree, e.g., on principles like free speech, private property and elected representation (Wang 1999) and might thus form an alliance of liberal democracies against more dictatorial regimes. Voeten (2000) provides empirical evidence.

Therefore, we hypothesize that cultural and political proximity with the G7 increases voting coincidence. We measure this with an index of political rights and civil liberties, the change of that index, the rule of law, perceived corruption and bureaucratic quality.[4] We also include a dummy that is one if a country's government has the same political color as the respective G7 country, i.e., both are either left- or right-wing governments.

A country's economic and political strength and its access to alternative capital sources might also be important for voting behavior. Arguably, politically and economically strong countries with easy access to private capital are less likely to accept bribes and are thus less likely to vote in line with G7 countries. For them, *PI* and *VI* have a relatively strong impact on delegates' utility, compared to *PE* and *VE*. The hypothesis can be related directly to the model in Lundborg (1998) introduced above, where it is shown that "cheaper" countries receive more aid, as it is easier to buy their votes. Dependence might be greater in times of crises and political instability, or when private capital is less freely flowing in general. Highly indebted countries frequently have no alternative to IMF and World Bank loans, increasing their dependence. Natural resources and other potential revenues decrease

[4] Appendix A lists all variables with their definitions and sources.

dependence. We employ a number of variables to proxy for dependence on foreign support:[5] total aid received (in percent of GNI); the change in total received aid; a composite indicator of national capability; total external debt (in percent of GDP); the change in total external debt; a variable measuring ethnic tensions; the rate of inflation; current account balance (in percent of GDP); overall budget balance (in percent of GDP); GDP per capita; and real GDP growth.[6]

Other variables potentially important for UN General Assembly voting patterns are international trade and foreign direct investment. With greater interdependence among countries, cooperation is more likely (e.g., Oneal and Russett 1999). This is because interdependence might create similar preferences on certain topics. Moreover, strong interdependence can create fears of losing access to markets. The hypothesis is connected to the public choice literature on economic sanctions. The introduction of quotas, e.g., might arguably hurt a country more, the larger its trade with a particular country.[7] According to Keohane (1967), dependence on trade thereby increases a country's responsiveness to external pressure. Foreign trade flows are thus a potential measure of foreign influence (Stone 2004), and the same is true for foreign direct investment. Economic ties might increase the probability of voting with the partner country. However, strong economic ties with developed countries might as well create feelings of exploitation and could thus give rise to voting against these countries (Kim and Russett 1996). In the context of our model, the result depends on the relative impact of *VE* and *PE*, on the one hand, and *VI* and *PI* on the other. Depending on the government's ideology, there might clearly be a conflict between *VI* and *PI*, and, depending on its main constituency, also be a conflict between *PE* and *VE* (for example, the government might be closely connected to potential losers from trade). The impact of trade and foreign direct investment on voting patterns is thus a priori ambiguous and is tested with exports and imports from the respective G7 country (in percent of GDP).[8]

The discussion above gives rise to in particular one additional hypothesis regarding the determinants of countries' voting behavior in the UN General Assembly which is related to our main hypothesis. In terms of our model, development aid can positively affect *PE*, if it is used for the delegates' personal or constituents' benefit; it positively affects *VE* if used for the benefit of society at large. The final hypothesis is therefore that bilateral foreign aid, or changes in aid, increases the probability that a recipient country votes in line with the donor. We employ net grants (as a percent of GDP) from the respective G7 country and the changes thereof to test whether bilateral aid impacts on voting behavior.[9]

[5] Arguably, some of these variables might partly capture pressure exerted by other countries. However, we control for pressure with more suitable proxies, so—holding pressure constant—the variables employed here reflect dependency rather than pressure.

[6] In case the variables are used in both levels and first-differences, the level variable has been lagged by one period. This alleviates the interpretation of the estimated coefficients. The qualitative conclusions are not affected by this.

[7] For a succinct overview of the literature on economic sanctions from the public choice perspective, see, e.g., Spindler (1995). See also Hillmann (1988) and Kaempfer and Willett (1989).

[8] Unfortunately, we cannot test for the impact of bilateral inflows and outflows of foreign direct investment, as inclusion of those variables would reduce the sample size well below 30 countries.

[9] We also included loans by the respective G7 country or countries and food aid, but did not have a sufficient number of observations for meaningful regression analysis.

4 Measuring voting coincidence

The main question we address in this paper is whether or not IMF and/or World Bank programs and loans affect the voting behavior of recipient countries in the UN General Assembly. In analyzing this question, we face several problems.

First, we need to establish how to measure voting coincidence in the UN General Assembly. There are several possibilities. Thacker (1999), among others, codes votes in agreement with the United States as 1, votes in disagreement as 0, and abstentions or absences as 0.5.[10] Wittkopf (1973) and Barro and Lee (2005) employed the fraction of times a country votes the same as the country of interest (either both voting yes, both voting no, both voting abstentions, or both being absent); Kegley and Hook (1991) simply discarded abstentions or absences. In any case, the resulting numbers are then divided by the total number of votes in each year. We concentrate on the method proposed by Thacker (1999) for both theoretical and statistical reasons. The difference between the three approaches lies in the way they weigh abstentions or absences, giving it a weight of 0, 0.5 or 1 in case the potential donor country does vote. Of course, any of these weights is arbitrary, but we prefer not opting for a corner solution and hence stick to the definition of Thacker (1999) in which a weight of 0.5 is used. Furthermore, from a statistical point of view this produces a dependent variable with a nicely bell-shaped distribution (as opposed to the other two definitions where the tails of the distribution do become rather fat). Hence, it is less likely that our results will be driven by extreme observations. Nevertheless, we test the robustness of our results by also employing the methods of Kegley and Hook (1991) and Barro and Lee (2005).

In addition to the data based on voting behavior in the same year only—as is the case with the above three definitions—we also calculate a moving average of the dependent variable. It is quite likely that proximity to the G7 countries evolves only slowly over time, and voting behavior of previous years might therefore give important information about a country's current position. Previous years enter the moving average with the weights 0.45, 0.25, 0.15, 0.10, and 0.05.

An important issue in previous studies has been the question of which UN General Assembly votes to include in either definition of voting coincidence. While the majority of the literature simply includes all votes, some researchers focus on "important" votes only. Clearly, the amount of effort a country puts into influencing others will depend on the importance of a vote. It has been pointed out in the introduction that not all votes in the General Assembly are likely to be of great importance to the United States and other G7 countries. Focusing the analysis on a sub-set of votes might thus be superior. Andersen et al. (2006) suggest that voting on non-key votes might represent countries' sincere preferences (what they call "bliss point"). The deviation of voting on key votes from voting on non-key votes could then be the appropriate dependent variable to focus on.

However, inclusion of all votes has also been defended. Wittkopf (1973) states that none of the alternatives focusing on "important" votes only is preferable to the general approach. Wittkopf replicates his overall results including only those votes on which the United States and the Soviet Union disagreed, finding that the results do not differ substantially from the analysis including all votes. Similarly, he replicates the previous analysis of Russett (1967), and also finds no substantial differences between "important" votes and all votes. Moreover, labeling issues as being important is highly subjective. At least for the United

[10] Similarly, Russett (1967) codes each country either 2 (yes), 1 (abstain or absent), or 0 (negative). Focusing on abstentions might be important as donors might bribe governments not only to comply, but also to avoid non-compliance (Zimmermann 1993).

States this could potentially be solved in employing the categorization provided by the State Department. The transmission of U.S. foreign policy preferences from the State Department to the World Bank and the IMF is not, however, necessarily a direct one (Thacker 1999), as it is mainly the Treasury controlling the IMF and the World Bank (Kahler 1990). The State Department's preferences might thus not give a good indication as to actual lobbying efforts.

For two reasons the main focus of this paper is on all votes, including non-key votes also. First, the classification into key votes and non-key votes is not available for countries other than the United States. And second, the U.S. State Department classifies those votes since 1983 only. Our study deals with a broader range of countries and a longer period of time (1970–2008). Nevertheless, we provide an analysis employing only key votes for comparison. We also report specifications that focus on key votes, but controlling for countries' potential "bliss points" by subtracting voting on non-key votes from voting on key votes.

Some of the previous studies exclude nearly unanimous votes, as it is unlikely that countries bribe on those. Clearly, however, the threshold above which votes are to be excluded is purely subjective. As a robustness test we discard votes where more than 80% of the countries agreed on the outcome.

Voting alignment is also likely to depend on the underlying topic. The voting behavior of each country on every roll call vote in the UN General Assembly since 1946 has been documented by Voeten and Merdzanovic (2009), and revised by Kilby (2009b).[11] With almost 20% of all votes during our sample, decisions related to Israel account for the by far largest share.[12] We want to ensure that our results are not driven by this. In addition to the above definitions of the voting variable, we thus also construct a variable where decisions concerning topics related to Israel are excluded.

The bottom row of Table 1 reports the number of observations available for the various dependent variables in case we focus on an artificially constructed G7 donor country (see below). The correlation coefficients—after having corrected for both recipient-country- and time-specific effects—are in the upper part. Our annualized sample of up to 188 countries covering the years 1970–2008 includes more than 6200 observations. When we concentrate on U.S. key votes, the number of country-years drops to about 4400.

Overall, the correlations among most of the various definitions are rather high. Excluding nearly unanimous votes from any of the three baseline definitions, i.e., Thacker, Barro–Lee

Table 1 Correlation of different definitions of voting coincidence (G7)

	Thacker	Barro–Lee	Kegley–Hoock	Mov.Avg.	U.S. key votes	No unanimous	No Israeli topics
Thacker	1	0.66	0.57	0.95	0.58	0.85	0.95
Barro–Lee	6212	1	0.96	0.91	0.66	0.91	0.95
Kegley–Hoock	6212	6212	1	0.91	0.58	0.91	0.94
# Observations	6212	6212	6212	5918	4442	6212	5075

Notes: Variables are corrected for country- and time-specific effects. Sample covers up to 188 countries, 1970–2008

[11] We thank Christopher Kilby for sharing his data.

[12] Other topics that received relatively large attention in the UN General Assembly include 'apartheid', 'arms' and 'nuclear power'. However, each of these took a share of only 9% in total voting. The results do not appear to be driven by one of these specific topics.

or Kegley–Hook, leads to a correlation of 0.85 or above. Correlation of the moving average versions with these three definitions also always exceeds 0.91. Even leaving out Israeli topics hardly affects voting coincidence; the correlation coefficient is at least 0.94. Hence, it is rather unlikely that our results will depend on issues like these. Nevertheless, we return to this below.

It is more likely that our results will be influenced by focusing on key votes only, and how we take account of abstentions and absences. The correlation between the three baseline definitions and the same definitions including only U.S. key votes is still high, however, amounting to roughly 0.6. This is in line with the results of Voeten (2000), showing that a country's position in the Assembly is independent of the importance of the issues.

The correlations between the three ways of dealing with abstentions or absences are between 0.57 and 0.96. For instance, the correlation between our main voting index according to the definition of Thacker and those according to the definition of Kegley and Hook is only 0.57. It will thus be important to test for the robustness of our findings using these alternative definitions of dealing with abstentions or absences.

The next issue concerns choosing the relevant donor country (or vote of reference) for a recipient country. The literature assumes the preferences of G7 countries to be sufficiently homogeneous to attribute domination of the IMF and World Bank to this group (Bird and Rowlands 2001). Most of the literature focuses on the United States. However, measuring voting compliance with the United States only or each G7 country individually might bias the results of the empirical analysis against finding support for the political pressure hypothesis (Copelovitch 2009). As the G7 countries rarely all vote in line among themselves, their individual pressures on the international organizations might neutralize them. As one example, there is evidence that France was trying to buy votes (in the Security Council) in order to oppose the Second Gulf War, while the United States was paying for support (Eldar 2008). Another case in point consists of the contested bids by Germany and Japan to become permanent members of the UN Security Council, which has been opposed by other members of the Security Council. To take this into account, we analyze not only compliance with each G7 country individually, but also construct a variable reflecting the average vote of the G7 countries. This has been done by Barro and Lee (2005) for France, Germany and the UK, and by Neumayer (2003) for all Development Assistance Committee (DAC) donors. We weigh each G7 countries' vote with its quota in the Fund to take its voting weight in the international organizations into account. We also separately investigate the G7 excluding the United States (what we label 'G6').

5 Results

Aid and loans might not be given to "bribe" governments, but to reward previous voting compliance. We thus have to deal with the time structure of our right-hand side variables. As a first step we run correlation analysis allowing for a one year lead or lag in our loan and aid variables. Both the dependent and the explanatory variables are first corrected for country- and time-specific effects and for the information already contained in the baseline variables. To account for the time structure we choose the lead or lag where the correlation with the voting coincidence variable is highest.

Table 2 reports the optimal lead/lag structure for our World Bank and IMF-related variables. Many relationships are of a contemporaneous nature. However, of those that are not, there are almost as many relationships pointing to a reward structure as there are towards bribing votes upfront. While there is thus some evidence that IMF and World Bank involvement increases voting coincidence, rewards and bribes cannot clearly be distinguished. We

Table 2 Lag-/ Lead-Structure of Loan-related variables with voting coincidence

	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7
IMF conc. loans, net	0	0	1	0	0	0	0	0	0
IMF non-conc. loans, net	1	1	0	1	1	1	0	1	0
IMF conc. loans, agreed	1	1	1	1	1	1	1	1	1
IMF non-conc. loans, agreed	0	1	0	−1	1	1	0	1	0
IMF conc. program, dummy	1	−1	−1	−1	−1	−1	1	1	−1
IMF non-conc. program, dummy	0	0	0	−1	0	0	0	0	0
World Bank conc. loans, net	−1	0	0	0	−1	0	0	0	0
World Bank non-conc. loans, net	1	1	1	1	1	1	0	1	1
World Bank techn. projects, number	0	0	0	0	0	0	0	0	0
World Bank adj. projects, number	0	0	0	0	0	−1	−1	0	0
World Bank other projects, number	0	0	−1	1	0	1	−1	0	0

Notes: Corrected for country- and time-specific effects and baseline variables. Concessional (non-concessional) IMF facilities included are SAF and PRGF (EFF and SBA). World Bank concessional (non-concessional) loans are IDA (IBRD) loans. Dummies refer to the number of programs starting in the respective year; numbers indicate the number of projects starting in a year. The G7 consists of Canada (CAN), France (FRA), the United Kingdom (GBR), Germany (DEU), Italy (ITA), Japan (JPN), and the United States (USA). The G6 consists of the G7 countries except for the United States

cannot even be sure that voting coincidence and Bank and Fund involvement are not both driven by some third underlying factors—IMF and World Bank involvement might be endogenous to General Assembly voting. This would be the case if, e.g., changes in "political friendship" with G7 countries are responsible for changes in a recipient country's voting behavior and changes in the extent to which it participates in programs of the international organizations at the same time.[13] The obvious way of addressing this potential problem is employing instruments for Fund and Bank programs and loans. However, finding suitable instruments for these variables is clearly less obvious. Barro and Lee (2005) propose countries' quota with the Fund, the share of a country's nationals among Fund staff, and General Assembly voting as instruments. In the context of our analysis, General Assembly voting drops from the list of potential instruments, and so do country quotas as they are largely collinear with our fixed country effects. We cannot use staff shares as these data are available in five year intervals only, and only for the IMF. We therefore tried to employ a number of economic variables—proposed as robust determinants of IMF programs in Sturm et al. (2005)—as instruments in addition to UN Security Council voting. However, the instruments did not pass the standard criteria for good instruments. As we do therefore not have convincing external instruments, we instead use internal instruments and employ the Arellano–Bond system GMM estimator to test whether the potential endogeneity of the IMF and World Bank variables affects the estimates. To anticipate our results, endogeneity does not seem to be an issue here, so that the results presented in the following can be taken at face value. In the empirical analysis we will work with the time structures derived here. The issue of potential endogeneity of the IMF and World Bank variables will be further addressed in Sect. 6.

[13] Note that when "political friendship" is constant over time, endogeneity would pose no problem to the analysis as our fixed country effects would capture that effect.

One of the main challenges in empirical analysis when there is no established benchmark is coming up with a reliable model. We employ a general-to-specific method to test the hypotheses outlined in Sect. 3 and construct a baseline model. Once the baseline model is determined, we concentrate on testing our main hypothesis (as outlined in Sect. 2).

The regression is a pooled time-series cross-section analysis (with yearly data). Parts of the analysis cover the time period 1970–2008 and extend to a maximum of 188 countries for our dependent variable. Since some of the data are not available for all countries or years, the panel data are unbalanced and the number of observations depends on the choice of explanatory variables. In particular, one of the variables we find important to control for—national capability—is available until 2001 only. Most of the analysis is thus restricted to the 1970–2001 period. We follow the recent literature on the determinants of roll-call votes (e.g., Broz 2005, 2008) and employ Stratmann's (2002) differences-in-difference approach. (However, the coefficients of the fixed country and time dummies are not reported in the tables.) As a consequence, we cannot include variables that do not change over time or are the same for all countries.

In our first step of coming up with a suitable baseline model we apply a general-to-specific procedure. We include all variables related to the four dimensions formulated above (described in more detail in Appendix A) and then delete that variable with the lowest significance. With the remaining variables, this procedure is repeated until all coefficients are significant at the 10% level. In a second step we check whether any of the previously deleted variables would be significant when added again. These significant variables are step by step included. The two steps are repeated until a final model converges.

The results of the general-to-specific analysis are shown in Appendix B. As was to be expected, the results of this procedure are to a certain extent donor-country specific. In fact, there is some evidence in favor of all hypotheses except for the impact of bilateral aid. Specifically, more democratic societies tend to vote in line with G7 countries. A number of times we also find greater voting coincidence when governments have similar political leanings (either both conservative, both central, or both left-wing), a higher index of corruption, or become more democratic. The rule of law matters for one particular donor country, France. We also find strong evidence that national capability, implying less dependence on foreign relationships, reduces the probability that a country votes in line with any of the G7 members.[14] Also, a large budget deficit increases voting coincidence for a number of donor countries. External debt, inflation, GDP per capita and GDP growth only occasionally enter the regressions with a significant coefficient. These results confirm that aid dependence increases voting coincidence, supporting our a priori hypothesis.

We find some support for the hypothesis that countries are more likely to vote in line with rising exports and imports to that country. There is thus no evidence that economic ties create feelings of exploitation, creating resentment against the trading partner, and leading to votes against the partner. The positive effects of interdependence clearly dominate here.

Note that the determinants of voting coincidence to some extent differ across countries. However, for ease of comparison we prefer to have the same baseline model for all countries. Given that the evidence shown in Table B.1 of Appendix B is in particular clear for our measures of democracy and national capability, we include these two variables in our baseline model. Table B.2 reports the estimation results for this model. Both the level of

[14]The composite indicator of national capability is a measure of power based upon six indicators (based on Singer et al. 1972): military expenditure, military personnel, energy consumption, iron and steel production, urban population, and total population.

significance and the size of the estimated coefficients are very stable across the different G7 countries.

Table 3 reports the results of our panel regressions when testing our main hypothesis for the individual G7 countries, and the combined G6 and G7 voting coincidence variable. Each column summarizes the results of a regression including one of the IMF and World Bank variables at the time. Each regression includes one of the variables representing our main hypothesis. All variables are added individually (with the time structure determined above), where national capability and democracy are included in all regressions in addition to the fixed time and country effects.[15]

Concentrating on the average G7 country, voting coincidence is more likely when non-concessional IMF flows are higher, higher non-concessional loans are agreed on, or more non-concessional IMF (EFF and SBA) programs are in effect. The same is true when more World Bank (technical, adjustment, and other) programs and projects are in place. As expected, and in line with the program and project variables, new net IBRD loans increase the probability that the borrower votes with the average G7 country. The results also show that concessional IMF and Bank loans have no significant impact on voting coincidence. As one explanation, the G7 countries might not regard the recipients' votes as being important in the General Assembly. For these poor countries, other considerations might be more salient in determining loan and program allocation. For example, France might want to influence Fund and Bank lending in favor of its former colonies, without asking the recipients for voting compliance in the Assembly. Alternatively, economic considerations might dominate the relations with these poor countries.

Turning to the quantitative impact of the significant variables, the results show that an increase of non-concessional IMF loans agreed by 1% of GDP increases voting coincidence by 0.26. The effect of non-concessional loans disbursed by the World Bank is substantially larger: voting coincidence increases by 0.9 with an increase of net loans by 1% of GDP. The start of a non-concessional IMF program increases voting coincidence by 0.01; the quantitative effect of an additional adjustment project by the World Bank equals 0.005.

Turning to the outcomes of the analysis for each of the members separately, the results for the G7 average most of the time also hold for each G7 country individually. However, there are some interesting differences. These differences mainly occur when focusing on the United States. Here the IMF variables are much less important. Also, World Bank projects are overall less significant for the United States. The impact of IDA and concessional IMF flows are mostly negative and significant. While the negative impact of concessional flows on voting coincidence is surprising, the robustness analysis presented in the next section shows that these results depend on the specific specification chosen, and thus on the correlations among the IMF and World Bank variables. The United States seems to be primarily using the World Bank whereas other G7 countries employ the Bank and Fund alike. Our results thus provide support for Gwin's (1997) observation of a particularly strong leverage of the United States on the World Bank relative to other donors. As noted above, this might be because the United States is the largest contributor to the IDA, the World Bank President is always American, the World Bank depends on U.S. capital markets to finance its operations, and the United States carries out detailed reviews of Bank loan proposals.

To summarize, we find clear evidence that non-concessional loans—independent of the international organization (IMF versus World Bank) or the way we measure it—do have a significant effect when explaining voting behavior of the non-G7 countries. Focusing on the

[15] When we omit democracy and national capability from these regressions we find similar results, based on regressions including seven additional years (up to 2008).

Table 3 UNGA voting and IMF and World Bank influence, OLS

	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7
IMF conc. loans, net	0.189	0.084	0.092	0.110	0.173	0.175	0.072	0.164	0.103
	(1.78)	(0.85)	(0.89)	(0.84)	(1.63)	(1.72)	(0.55)	(1.47)	(0.97)
IMF non-conc. loans, net	0.302	0.211	0.245	0.305	0.311	0.317	0.187	0.294	0.263
	(3.58)	(2.72)	(2.85)	(2.96)	(3.72)	(3.93)	(1.74)	(3.34)	(3.05)
IMF conc. loans, agreed	−0.064	−0.054	−0.033	−0.096	−0.084	−0.088	0.064	−0.080	−0.039
	(−1.45)	(−1.32)	(−0.76)	(−1.79)	(−1.93)	(−2.09)	(1.17)	(−1.74)	(−0.90)
IMF non-conc. loans, agreed	0.279	0.201	0.220	0.324	0.258	0.213	0.069	0.256	0.236
	(4.13)	(3.42)	(3.30)	(3.91)	(4.09)	(3.50)	(0.83)	(3.85)	(3.52)
IMF conc. program, dummy	−0.004	−0.005	−0.004	−0.010	−0.007	−0.007	0.007	−0.006	−0.004
	(−0.95)	(−1.19)	(−0.98)	(−1.91)	(−1.52)	(−1.68)	(1.40)	(−1.44)	(−0.90)
IMF non-conc. program, dummy	0.014	0.012	0.013	0.015	0.015	0.012	0.005	0.015	0.013
	(5.91)	(5.27)	(5.39)	(5.03)	(6.15)	(5.03)	(1.47)	(5.99)	(5.59)
World Bank conc. loans, net	−0.086	−0.234	−0.157	−0.267	−0.155	−0.066	−0.126	−0.134	−0.141
	(−0.95)	(−2.86)	(−1.80)	(−2.47)	(−1.71)	(−0.77)	(−1.15)	(−1.44)	(−1.61)
World Bank non-conc. loans, net	0.777	0.800	0.815	1.044	0.864	0.766	0.901	0.856	0.879
	(4.37)	(4.88)	(4.65)	(4.81)	(4.90)	(4.49)	(4.14)	(4.61)	(4.99)
World Bank techn. projects, number	0.007	0.006	0.006	0.007	0.007	0.005	0.003	0.007	0.006
	(3.25)	(3.22)	(2.90)	(2.96)	(3.35)	(2.38)	(1.07)	(3.07)	(2.75)
World Bank adj. projects, number	0.005	0.005	0.005	0.005	0.006	0.003	−0.002	0.006	0.005
	(3.30)	(3.74)	(3.44)	(2.60)	(3.49)	(2.14)	(−1.09)	(3.52)	(3.36)
World Bank other projects, number	0.003	0.001	0.002	0.002	0.002	0.003	0.001	0.002	0.002
	(5.36)	(2.92)	(3.11)	(3.74)	(4.16)	(5.39)	(1.83)	(3.90)	(3.01)

Notes: The dependent variable is the voting coincidence with the respective country or country group. Each cell represents one regression in which also country- and time-specific effects and the baseline variables are included. T-statistics are shown in parentheses. Concessional (non-concessional) IMF facilities included are SAF and PRGF (EFF and SBA). World Bank concessional (non-concessional) loans are IDA (IBRD) loans. Dummies refer to the number of programs starting in the respective year; numbers indicate the number of projects starting in a year

individual G7 countries, only the United States does not seem to follow the general pattern. Here countries vote more in line only with additional World Bank support.

6 Robustness

To examine both the sensitivity of our baseline model and the coefficients of our explanatory variables of interest to changes in model specification we apply (variants) of the so-called Extreme Bounds Analysis (EBA) as suggested by Leamer (1983) and Levine and Renelt (1992). The central difficulty in that line of research—which also applies to the research topic of the present paper—is that several different models may all seem reasonable given the data, but yield different conclusions about the parameters of interest. Presenting only the results of the model preferred by the author can be misleading. An EBA provides information about how sensitive the findings are to alternative modeling choices.[16] We will report the percentage of the regressions in which the coefficient of the variable of interest is significantly different from zero at the 5% level and its unweighted cumulative distribution function (CDF(0)), i.e., the fraction of the estimated cumulative distribution function lying on one side of zero.[17]

Table 4 presents the results of the EBA for the individual G7 countries and the weighted average. Besides the fixed country and time effects only national capability and the index for democracy are included in the base model. All 27 remaining variables used to test our hypotheses have then been added one at a time, resulting in well over 4000 regressions to test for the robustness of each variable of interest.

Table 5, on the other hand, is useful for exploring the impact of each variable on voting behavior. It reports in the first column the average value of each variable and its standard error as used in the baseline model. The next seven columns contain the average estimated coefficient (and its standard deviation). The final column reports how the index of G7 voting coincidence is predicted to change with a one standard deviation change in the respective variable of interest.

As can be seen from the tables, the pattern of significant variables is fairly similar among the seven countries and their weighted average. Again, the only significant differences appear to be between the United States and the remaining G7 countries. Generally, voting with the G7 is robustly more likely for more democratic countries and those with lower levels of national capability. The results are more or less in line with the individual panel regressions reported above. Most notably, the results obtained for the IMF and the World Bank are robustly related to voting, with four variables showing a CDF(0) of at least 0.90 in the EBA referring to the G7 variable, and similar results for the individual country regressions (excluding the United States). The coefficients of these variables are also in line with those presented above and have the highest overall impact on voting coincidence of all variables used to test our main hypothesis. According to the results, a one standard deviation increase in IMF non-concessional loans agreed increases voting coincidence by 0.0019 points. The respective increase is 0.0027 for Extended Fund Facility and Stand-By programs, 0.0017 for IBRD flows, and 0.0026 for World Bank adjustment projects.

[16] See, e.g., Sturm and De Haan (2005) or Appendix C of Dreher et al. (2009a) for a short introduction.

[17] As the robustness analysis includes the donor-specific variables that are occasionally important determinants of voting behavior according to the results presented in Appendix B, the potential problem of neglecting donor-specific variables in our baseline model is hereby alleviated.

Table 4 Significance in the extreme bounds analysis

	Percentage regressions significant at 5% level									CDF(0)								
	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7
Baseline variables																		
National capability	74	82	79	70	75	90	100	76	79	0.93	0.99	0.98	0.92	0.93	0.99	1.00	0.95	0.97
Democracy [−1]	100	97	96	100	100	100	73	99	94	1.00	1.00	1.00	1.00	1.00	1.00	0.96	1.00	0.98
Main hypothesis: IMF & World Bank support																		
IMF conc. loans, net	29	2	5	1	5	40	0	13	4	0.94	0.80	0.76	0.84	0.76	0.94	0.67	0.91	0.80
IMF non-conc. loans, net	36	16	30	21	30	49	22	24	34	0.90	0.86	0.83	0.89	0.83	0.92	0.82	0.85	0.83
IMF conc. loans, agreed	0	0	3	0	3	12	0	3	0	0.78	0.77	0.70	0.84	0.70	0.86	0.79	0.83	0.71
IMF non-conc. loans, agreed	74	68	48	55	48	48	0	58	51	0.97	0.94	0.91	0.95	0.91	0.93	0.72	0.95	0.91
IMF conc. program, dummy	2	0	0	4	0	2	14	3	0	0.72	0.65	0.66	0.76	0.66	0.76	0.86	0.78	0.66
IMF non-conc. program, dummy	93	81	74	74	74	87	8	99	83	0.99	0.99	0.98	0.97	0.98	0.99	0.80	1.00	0.98
World Bank conc. loans, net	23	9	3	8	3	15	2	3	3	0.83	0.75	0.73	0.75	0.73	0.82	0.73	0.74	0.74
World Bank non-conc. loans, net	35	48	46	42	46	45	94	47	52	0.83	0.88	0.88	0.87	0.88	0.86	0.99	0.86	0.88
World Bank techn. projects, number	52	71	49	44	49	19	1	52	38	0.95	0.98	0.95	0.96	0.95	0.92	0.77	0.94	0.90
World Bank adj. projects, number	100	100	100	96	100	72	0	92	91	1.00	1.00	1.00	0.99	1.00	0.98	0.73	0.99	0.99
World Bank other projects, number	28	17	15	31	22	42	13	15	15	0.81	0.77	0.77	0.83	0.80	0.90	0.91	0.75	0.75

Notes: The dependent variable is the voting coincidence with the respective country or country group. Estimation is with OLS. Country- and time-specific effects and baseline variables are included in all regressions. Each cell in this table is based upon 4525 regressions in case of the baseline variables, or 4089 regressions for the variables testing our main hypotheses. Concessional (non-concessional) IMF facilities included are SAF and PRGF (EFF and SBA). World Bank concessional (non-concessional) loans are IDA (IBRD) loans. Dummies refer to the number of programs starting in the respective year; numbers indicate the number of projects starting in a year

Table 5 Impact according to the extreme bounds analysis

	Sample Avg.	Average beta (standard deviation)									Impact G7
		CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7	
Baseline variables											
National capability	0.004	−3.623	−4.485	−4.672	−3.246	−3.895	−3.893	−6.937	−3.840	−4.791	−0.0542
	(0.011)	(0.814)	(0.764)	(0.808)	(1.024)	(0.822)	(0.779)	(1.129)	(0.839)	(0.853)	
Democracy [−1]	3.871	0.010	0.008	0.008	0.010	0.010	0.008	0.004	0.009	0.008	0.0157
	(2.016)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
Main hypothesis: IMF & World Bank support											
IMF conc. loans, net	0.001	0.182	0.101	0.104	0.132	0.104	0.180	0.047	0.167	0.108	0.0007
	(0.007)	(0.112)	(0.105)	(0.115)	(0.141)	(0.115)	(0.108)	(0.145)	(0.116)	(0.112)	
IMF non-conc. loans, net	0.001	0.148	0.112	0.105	0.158	0.105	0.163	0.135	0.126	0.114	0.0010
	(0.008)	(0.090)	(0.086)	(0.090)	(0.113)	(0.090)	(0.088)	(0.120)	(0.097)	(0.094)	
IMF conc. loans, agreed	0.002	−0.031	−0.031	−0.029	−0.055	−0.029	−0.050	0.022	−0.045	−0.026	−0.0004
	(0.017)	(0.046)	(0.042)	(0.047)	(0.056)	(0.047)	(0.043)	(0.058)	(0.047)	(0.044)	
IMF non-conc. loans, agreed	0.003	0.214	0.200	0.160	0.201	0.160	0.161	0.044	0.204	0.170	0.0019
	(0.011)	(0.077)	(0.069)	(0.076)	(0.087)	(0.076)	(0.069)	(0.100)	(0.077)	(0.078)	
IMF conc. program, dummy	0.031	0.000	−0.001	−0.001	−0.004	−0.001	−0.002	0.006	−0.002	−0.001	−0.0002
	(0.172)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)	
IMF non-conc. program, dummy	0.117	0.009	0.008	0.008	0.008	0.008	0.008	0.003	0.010	0.008	0.0027
	(0.321)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	

Table 5 (*Continued*)

	Sample Avg.	Average beta (standard deviation)									Impact G7
		CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7	
World Bank conc. loans, net	0.005	0.097	−0.048	−0.002	−0.100	−0.002	0.079	−0.038	0.008	0.000	0.0000
	(0.011)	(0.106)	(0.100)	(0.105)	(0.133)	(0.105)	(0.101)	(0.135)	(0.114)	(0.109)	
World Bank non-conc. loans, net	0.001	0.265	0.339	0.337	0.422	0.337	0.300	0.767	0.365	0.382	0.0017
	(0.004)	(0.184)	(0.173)	(0.181)	(0.229)	(0.181)	(0.175)	(0.233)	(0.194)	(0.189)	
World Bank techn. projects, number	0.133	0.004	0.005	0.004	0.004	0.004	0.003	0.002	0.004	0.003	0.0013
	(0.391)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	
World Bank adj. projects, number	0.192	0.005	0.005	0.005	0.005	0.005	0.004	−0.001	0.005	0.005	0.0026
	(0.534)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	
World Bank other projects, number	1.406	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.0013
	(2.206)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
		Sample average (standard error)									
Voting coincidence		0.557	0.469	0.457	0.526	0.543	0.581	0.297	0.520	0.459	
		(0.123)	(0.130)	(0.139)	(0.151)	(0.130)	(0.107)	(0.134)	(0.145)	(0.138)	

Notes: The dependent variable is the voting coincidence with the respective country or country group. Estimation is with OLS. Country- and time-specific effects and baseline variables are included in all regressions. The first column reports the sample average (and standard error) for each variable. The final column shows the estimated average impact of a shock of one standard error in each variable on G7 voting coincidence in percentage points. Concessional (non-concessional) IMF facilities included are SAF and PRGF (EFF and SBA). World Bank concessional (non-concessional) loans are IDA (IBRD) loans. Dummies refer to the number of programs starting in the respective year; numbers indicate the number of projects starting in a year

The foregoing results make us confident that all G7 countries—with the exception of the United States—can be well-described by a model including, besides our baseline variables, IMF non-concessional flows and programs and World Bank adjustment projects (see also the results for the G6). For the United States, the results point to including World Bank non-concessional flows and the number of other Bank projects besides the baseline variables. Table 6 reports the results of an extended model, containing these variables in addition to the baseline. The results show that World Bank adjustment projects and IMF programs do not robustly determine voting in line with the United States. All other variables are significant at the 10% level at least throughout.

Our next step further elaborates on this extended model. Due to space restraints, we restrict ourselves to the last three columns of Table 6, i.e., the United States, the average G7 and the average G6.

As described above, the definition of voting coincidence varied in the previous literature. We therefore test for the robustness of our results to changes in this definition. We also test whether a moving average version of voting coincidence, the exclusion of non-key votes, employing the difference between key and non-key votes, the exclusion of almost unanimous votes or the exclusion of Israeli topics affects our results.

There has also been some discussion about whether the end of the Cold War introduced a structural shift in countries' positions in the Assembly (see, e.g., Voeten 2000). Arguably, the determinants of voting in the General Assembly need not be constant over the almost 40 years under study. The IMF's support for countries with strong ties to the United States, but lacking effective reform programs, was particularly pronounced in the Cold War era (Krueger 1998). Regarding the strategic importance of multilateral loans, this shift might be important. During the Cold War, pressure by both the West and the East on non-aligned countries was rather open and direct. Comparably obvious direct pressure might not be tolerated by the international community today. In addition, after the end of the Cold War, countries are less constrained by alignments and might thus be more likely to vote according to their preferences when not being bribed. Particularly, economically weak countries no longer need protection by "their" bloc and now need to be bribed to achieve alignment. To capture this break, we therefore replicated the models allowing the coefficients to differ for the periods before 1991 and after 1990.

Finally, we also replicate the analysis omitting those countries that never received IMF or, respectively, World Bank loans, and a sample omitting less developed countries.

Table 7 presents the results. The first column replicates the extended model of Table 6 for the G6, G7 and the United States. The remaining columns check the sensitivity of these results. Turning first to the average G7 variable, using alternative dependent variables rarely changes the results. According to all definitions of the dependent variable, the number of non-concessional IMF programs increase voting coincidence, with coefficients significant at the 1% level. The impact of non-concessional World Bank money remains significant at the 1% level in most, but not all regressions. The exceptions are the regressions focusing on key votes only, using the Kegley–Hook specification, and when using the difference in key and non-key votes as dependent variable. Turning to adjustment programs financed by the World Bank the table shows that the coefficient remains significant at least at the 10% level in all regressions. In summary, our main results are fairly robust to changes in the dependent variable and the exclusion of specific votes.

Table 7 also tests whether the results differ for the periods before 1991 and after 1990. The column "Change after 1990" thus interacts the IMF and World Bank variables with a dummy for the post-Cold War period. The results show that the impact of the Financial Institutions on voting coincidence has indeed changed over time. Regarding the weighted

Table 6 Testing the extended models, OLS

	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7	USA
Baseline variables										
National capability	−6.378	−6.880	−7.524	−6.027	−6.410	−5.903	−9.766	−6.426	−7.489	−9.710
	(−8.73)	(−10.50)	(−10.57)	(−7.44)	(−8.89)	(−8.51)	(−10.48)	(−8.47)	(−10.49)	(−10.41)
Democracy [−1]	0.013	0.011	0.012	0.013	0.013	0.010	0.009	0.013	0.012	0.009
	(15.74)	(15.30)	(14.81)	(14.27)	(15.50)	(12.74)	(8.88)	(14.77)	(14.43)	(8.88)
Main hypothesis: IMF & World Bank support										
IMF non-conc. program, dummy	0.012	0.010	0.011	0.011	0.012	0.009	0.004	0.012	0.011	
	(4.80)	(4.34)	(4.45)	(4.14)	(4.95)	(4.05)	(1.43)	(4.87)	(4.58)	
World Bank non-conc. loans, net [1]	0.637	0.645	0.691	0.745	0.690	0.540	0.753	0.697	0.731	0.750
	(3.58)	(4.05)	(3.99)	(3.78)	(3.94)	(3.20)	(3.32)	(3.78)	(4.21)	(3.31)
World Bank adj. projects, number	0.005	0.005	0.005	0.004	0.005	0.003	0.002	0.005	0.005	
	(2.81)	(3.31)	(3.05)	(2.15)	(2.98)	(1.65)	(0.89)	(3.01)	(2.96)	
World Bank other projects, number [−1]										0.001
										(1.74)
p-value Hausman test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. R^2	0.81	0.87	0.86	0.86	0.84	0.80	0.78	0.86	0.86	0.78
Number of observations	3784	3784	3784	3784	3784	3784	3784	3784	3784	3783
Number of countries	158	158	158	158	158	158	158	158	158	158
Period	73–01	73–01	73–01	73–01	73–01	73–01	73–01	73–01	73–01	73–01

Notes: The dependent variable is the voting coincidence with the respective country or country group. Country- and time-specific effects are included in all regressions. T-statistics are shown in parentheses. The IMF non-concessional program dummy is one in years where EFF and SBA programs start. World Bank concessional (non-concessional) loans are IDA (IBRD) loans. Number indicates the number of projects starting in a year

Table 7 Sensitivity of extended OLS-models for the G6, G7 and the United States

	Thacker/ Full sample	Barro–Lee	Kegley–Hoock	Mov. Avg.	U.S. key votes	U.S. key votes–non-key votes	No unanimous	No Israeli topics	Before 1991	Change after 1990	Ever been IMF client	Ever been World Bank client	Non-LDCs
G6													
IMF non-conc. program, dummy	0.012	0.023	0.017	0.011	0.037	0.041	0.012	0.011	0.008	0.012	0.012	0.012	0.014
	(4.87)	(3.94)	(3.31)	(5.15)	(4.93)	(4.24)	(4.73)	(4.25)	(2.51)	(2.35)	(4.40)	(4.61)	(3.97)
World Bank non-conc. loans, net [1]	0.697	1.007	0.382	0.549	0.406	0.118	0.868	0.777	0.374	1.178	0.853	0.627	0.848
	(3.78)	(2.42)	(1.03)	(3.53)	(0.77)	(0.17)	(4.58)	(3.97)	(1.66)	(2.86)	(4.15)	(3.35)	(3.00)
World Bank adj. projects, number	0.005	0.007	0.005	0.003	0.012	0.014	0.005	0.005	0.001	0.007	0.005	0.005	0.009
	(3.01)	(1.77)	(1.57)	(2.46)	(2.89)	(2.43)	(2.71)	(2.60)	(0.20)	(2.30)	(2.82)	(3.19)	(3.29)
Adj. R^2	0.86	0.60	0.58	0.88	0.63	0.51	0.82	0.85	0.87		0.86	0.86	0.86
Number of observations	3784	3784	3784	3586	2656	2656	3784	3784	3784		3048	3477	2393
Number of countries	158	158	158	156	158	158	158	158	158		125	143	103
Period	73–01	73–01	73–01	73–01	83–01	83–01	73–01	73–01	73–01		73–01	73–01	73–01
G7													
IMF non-conc. program, dummy	0.011	0.019	0.015	0.009	0.036	0.041	0.011	0.010	0.005	0.009	0.011	0.011	0.012
	(4.58)	(3.89)	(3.50)	(4.39)	(4.77)	(4.23)	(4.39)	(3.50)	(1.92)	(1.88)	(4.27)	(4.34)	(3.56)
World Bank non-conc. loans, net [1]	0.731	0.837	0.417	0.629	0.225	−0.062	0.882	0.832	0.427	1.055	0.857	0.678	0.924
	(4.21)	(2.34)	(1.30)	(4.28)	(0.42)	(-0.09)	(4.79)	(4.20)	(1.99)	(2.70)	(4.45)	(3.83)	(3.43)
World Bank adj. projects, number	0.005	0.007	0.005	0.003	0.011	0.013	0.005	0.004	0.001	0.006	0.005	0.005	0.009
	(2.96)	(2.06)	(1.68)	(2.53)	(2.63)	(2.29)	(2.82)	(2.23)	(0.54)	(1.83)	(2.86)	(3.11)	(3.37)
Adj. R^2	0.86	0.62	0.60	0.88	0.64	0.52	0.82	0.83	0.86		0.86	0.86	0.85
Number of observations	3784	3784	3784	3586	2656	2656	3784	3784	3784		3048	3477	2393
Number of countries	158	158	158	156	158	158	158	158	158		125	143	103
Period	73–01	73–01	73–01	73–01	83–01	83–01	73–01	73–01	73–01		73–01	73–01	73–01

Table 7 (*Continued*)

	Thacker/ Full sample	Barro–Lee	Kegley–Hoock	Mov. Avg.	U.S. key votes	U.S. key votes–non-key votes	No unanimous	No Israeli topics	Before 1991	Change after 1990	Ever been IMF client	Ever been World Bank client	Non-LDCs
USA													
World Bank non-conc. loans, net	0.932	0.352	0.280	0.925	1.018	0.049	1.039	0.845	0.638	0.446	1.138	0.955	1.108
	(4.16)	(1.70)	(1.45)	(5.29)	(1.97)	(0.09)	(4.35)	(3.84)	(2.08)	(0.91)	(4.50)	(4.19)	(3.52)
World Bank other projects, number [−1]	0.001	0.003	0.003	0.001	0.006	0.005	0.001	0.001	0.002	−0.003	0.001	0.001	0.002
	(1.67)	(5.21)	(5.40)	(2.28)	(3.51)	(3.19)	(1.61)	(1.64)	(2.03)	(−2.83)	(1.65)	(1.60)	(2.75)
Adj. R^2	0.78	0.75	0.74	0.84	0.68	0.64	0.76	0.81	0.78		0.77	0.77	0.78
Number of observations	3786	3786	3786	3588	2655	2655	3786	3787	3786		3049	3479	2396
Number of countries	158	158	158	156	158	158	158	158	158		125	143	103
Period	73–01	73–01	73–01	73–01	83–01	83–01	73–01	73–01	73–01		73–01	73–01	73–01

Notes: The dependent variable is the voting coincidence with the respective country or country group mentioned in the first column. Baseline variables, country- and time-specific effects are included in all regressions. T-statistics are shown in parentheses. The IMF non-concessional program dummy is one in years where EFF and SBA programs start. World Bank concessional (non-concessional) loans are IDA (IBRD) loans. Number indicates the number of projects starting in a year

G7 variable, the impact of the Fund and Bank becomes much stronger after 1990. In the post-1990 period, the impact of all three explanatory variables of interest has increased in significance. The evidence thus supports the hypothesis that the role of politics in General Assembly voting became stronger with the end of the Cold War. Most likely, the role of indirect pressure became more important, as open pressure on other governments is no longer tolerated by voters in G7 countries. The table also shows that the exclusion of countries never receiving IMF or, respectively, World Bank loans does not change the previous results. Looking at the results excluding less developed countries, the coefficients of interest again remain similar.

Turning to the sensitivity of changing the dependent variable for the extended G6- and U.S.-models, the results are again robust to our tests. Regarding the G6, the results are almost identical as compared to those for the G7. However, World Bank involvement does not become more important after the end of the Cold War when it comes to voting with the United States. The impact of projects even disappeared with the end of the Cold War.

As another important issue, as discussed above, the analysis does so far neglect the potential endogeneity of IMF and World Bank involvement. To deal with this, we employ the system GMM estimator as suggested by Arellano and Bover (1995) and Blundell and Bond (1998). The dynamic panel GMM estimator exploits an assumption about the initial conditions to obtain moment conditions that remain informative even for persistent data and is considered most appropriate in the presence of endogenous regressors. The results are based on the two-step estimator implemented by Roodman (2006) in Stata, including Windmeijer's (2005) finite sample correction and forward orthogonal deviations rather than first differencing. We include the IMF and World Bank variables with their contemporaneous values and treat all explanatory variables as endogenous. As before, we include time dummies in the regressions. We perform a Sargan–Hansen test on the validity of the instruments used (amounting to a test for the exogeneity of the covariates), and the Arellano–Bond test of second order autocorrelation which must be absent in order for the estimator to be consistent. In order to minimize the number of instruments in the regressions we collapse the instruments as suggested in Roodman (2006).

Table 8 shows the results for the G6, G7 and the United States. As can be seen, our overall result is not qualitatively affected by the potential endogeneity of the explanatory variables. The Sargan-Hansen test does not reject the instruments at conventional levels of significance in both specifications.[18] However, the Arellano–Bond test rejects the hypothesis of no second order autocorrelation. We therefore entered a second lag of the dependent variable into the regressions. As it turns out, both specification tests do not reject the instruments when the second lag is included, while the results are qualitatively similar. Note, however, that some of the results are no longer significant at conventional levels.

To summarize, our results seem to be fairly robust to changes in the definition of the dependent variable, changes in the sample, and method of estimation.

7 Conclusions

The paper has analyzed empirically the influence of the IMF and the World Bank on voting patterns in the UN General Assembly. Our results, based on a substantial number of

[18] Note that we also performed the difference-in-Sargan test on the additional instruments in the system GMM. This test does also not reject the specification at conventional levels of significance.

Table 8 Testing the main hypothesis for G6, G7 and United States, GMM

	G6		G7		USA	
Dependent variable [−1]	0.553	0.591	0.544	0.604	0.477	0.560
	(5.16)	(15.04)	(3.73)	(17.76)	(4.84)	(15.15)
Dependent variable [−2]		0.290		0.252		0.234
		(8.53)		(11.40)		(9.00)
National capability	−2.544	0.607	−2.565	−0.352	−3.751	−0.529
	(0.40)	(0.72)	(0.37)	(0.35)	(0.59)	(0.63)
Democracy [−1]	0.005	0.004	0.005	0.004	0.007	0.004
	(1.94)	(2.49)	(1.98)	(2.35)	(2.07)	(1.77)
IMF non-conc. program, dummy	0.007	0.006	0.005	0.005		
	(3.04)	(2.75)	(1.78)	(2.38)		
World Bank non-conc. loans, net	0.283	−0.018	0.365	0.138	0.981	0.586
	(1.64)	(0.12)	(2.03)	(0.83)	(2.64)	(2.41)
World Bank adj. projects, number	0.003	0.004	0.003	0.004		
	(2.27)	(2.86)	(1.64)	(2.95)		
World Bank other projects, number					0.002	0.000
					(2.46)	(0.68)
Number of countries	158	158	158	158	158	158
Number of observations	3757	3703	3757	3703	3756	3702
Period	73–01	73–01	73–01	73–01	73–01	73–01

Notes: The dependent variable is the voting coincidence with the respective country or country group. Time-specific effects are included in all regressions. Robust t-statistics are shown in parentheses. The IMF program dummy is one in years where EFF and SBA programs start. World Bank adjustment and other projects are the number of projects starting in a specific year

different regression specifications and Extreme Bounds Analysis for a sample of up to 188 countries over the 1970–2008 period, show that the IMF and the World Bank indeed influence voting in the UN General Assembly. Overall, countries receiving adjustment projects and larger non-concessional loans from the World Bank vote more frequently in line with the average G7 country. The same is true for countries receiving non-concessional IMF programs.

Regarding voting coincidence with the United States, World Bank non-concessional loans have a significant robust impact, while IMF loans and programs do not. The United States thus seems to be primarily using the World Bank whereas other G7 countries employ Bank and Fund alike. Our results provide support for Gwin's (1997) observation of a particularly strong leverage of the United States on the World Bank. Gwin expects this to be the case because the United States is the largest contributor to the IDA, the World Bank President is always American, the World Bank depends on U.S. capital markets to finance its operations, and the United States carries out detailed reviews of Bank loan proposals. This provides the United States with substantial influence as the Bank thereby pays closer attention to it than to any other major shareholder. While the United States also is the largest shareholder of the Fund, there is evidence that other major shareholders of the IMF might counterbalance U.S. influence when their interests diverge (e.g., Copelovitch 2009).

As another interesting result of our analysis, the role of politics in General Assembly voting became stronger with the end of the Cold War for the average G7 country (but not for the United States). As a potential explanation, bribing might have become more relevant as during the Cold War the military alliances dominated voting patterns in the Assembly. Moreover, while using bilateral money to bribe governments at the time of external military threat might have been acceptable to voters in G7 countries, this is less likely to be the case today. Employing international organizations to hide such behavior would then be more valuable to G7 governments.

Finally, we find that—for the average G7 country—it is non-concessional rather than concessional money that matters for voting compliance. Concessional loans are given to countries with low per capita incomes, and frequently on a rather continuous basis. IMF non-concessional loans, to the contrary, are frequently negotiated quickly at times of severe economic crises, so the recipient might well be forced to accept the political strings attached.[19]

The empirical results lend support to the recent proposals by the British central bank governor Mervyn King, suggesting to give greater independence to the IMF. With IMF and World Bank money being used to achieve certain outcomes in the Assembly, voting outcomes do not necessarily reflect the interests of the majority of UN member states, but those of the most influential shareholders of the IMF and the World Bank—undermining the legitimacy of UNGA decisions. With an independent Executive Board, the political influence of the major shareholders is likely to be substantially reduced (see also Vreeland 2006a). The influence of governments could also be reduced by transferring the control of international organizations to the member countries' citizens, as recently discussed in Frey and Stutzer (2006) and Tullock (2006).[20] If governments use the Fund and the Bank to hide their political motives from their voters, clearly, direct citizen control could help solving the problem.

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[19] See Vreeland (2006b, 2007) for a recent discussion on compliance with IMF conditionality, and Dreher (2009) for a broader discussion of conditionality. Marchesi and Sabani (2007) and Berlinschi (2010) analyze the conditions under which reputation concerns affect compliance with conditionality.

[20] According to Frey and Stutzer, a representative sample of trustees should be chosen among the citizenry of the member states. The trustees can launch initiatives, vote in referendums on issues related to the organizations and would be allowed to recall the institutions' executives.

Appendix A: Data description and sources

Table A.1

Abbreviation	Description	Source
Voting coincidence		
Voting coincidence	Percentage of votes within a year which are inline with one of the G7 member countries	Voeten and Merdzanovic (2009), Kilby (2009b)
Main hypothesis: IMF & World Bank support		
IMF conc. loans, net	Net IMF financing (concessional) (as % of GDP)	IMF (2009)
IMF non-conc. loans, net	Net IMF financing (nonconcessional) (as % of GDP)	IMF (2009)
IMF conc. loans, agreed	Agreed IMF financing (concessional) (as % of GDP)	IMF (2009)
IMF non-conc. loans, agreed	Agreed IMF financing (nonconcesional) (as % of GDP)	IMF (2009)
IMF conc. program, dummy	Start of a IMF SAF and/or PRGF program in that year	IMF annual reports, various years
IMF non-conc. program, dummy	Start of a IMF EFF and/or SBA program in that year	IMF annual reports, various years
World Bank conc. loans, net	IDA (NFL, as % of GDP)	World Bank (2008)
World Bank non-conc. loans, net	Net financial flows, IBRD (as % of GDP)	World Bank (2008)
World Bank techn. projects, number	Number of World Bank technical loan programs starting that year	www.worldbank.org
World Bank adj. projects, number	Number of World Bank adjustment programs starting that year	www.worldbank.org
World Bank other projects, number	Number of other World Bank programs starting that year	www.worldbank.org
Hypothesis 1: cultural and political proximity		
Democracy	8 − (Political rights index + Civil liberties index)/2	Freedom House (2009)
Change in democracy	Change in democracy	Freedom House (2009)
Rule of law	Rule of law (law and order tradition) indicator	International Country Risk Guide Data
Corruption	Indicator for corruption in government	International Country Risk Guide Data
Bureaucratic quality	Indicator for bureaucratic quality	International Country Risk Guide Data
Political color inline	Chief Executive's Party in recipient and donor country both either Right or Left (L)	Beck et al. (2001)

Table A.1 (*(Continued)*)

Abbreviation	Description	Source
Hypothesis 2: dependency on foreign support		
Aid	Aid (as % of GNI)	World Bank (2008)
Change in aid	Change in aid (as % of GNI)	World Bank (2008)
National capability	Composite Indicator of National capability (v3.01)	Singer et al. (1972)
External debt	Total external debt corrected for the use of IMF credit, IBRD loans and IDA credits (as % of GDP)	World Bank (2008)
Change in external debt	Change in total external debt corrected for the use of IMF credit, IBRD loans and IDA credits (as % of GDP)	World Bank (2008)
Ethnic tension	Presence of ethnic tensions	International Country Risk Guide Data
Inflation	Inflation, consumer prices (annual %) $(=\pi/1+\pi)$	World Bank (2008)
Current account balance	Current account balance (% of GDP)	World Bank (2008)
Budget balance	Overall budget balance, including grants (% of GDP)	World Bank (2008)
GDP per capita	Log of GDP per capita (constant 1995 U.S. $)	World Bank (2008)
GDP growth	real GDP growth (annual %)	World Bank (2008)
Hypothesis 3: trade flows		
Exports from donor	Exports from donor country (as % recipient GDP)	OECD Stat. Compendium
Imports of donor	Imports of donor country (as % recipient GDP)	OECD Stat. Compendium
Hypothesis 4: bilateral aid		
Net grants from donor	Net grants (as % recipient GDP)	OECD Stat. Compendium
Change net grants donor	Change in net grants ($\times 1000$ and as % recipient GDP)	OECD Stat. Compendium

Notes: The table lists all variables included in the general-to-specific analysis described in the text and the IMF and World Bank variables

Appendix B: Selection of the baseline model

Table B.1 General-to-specific results in selecting the baseline model, OLS

	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7
Hypothesis 1: cultural and political proximity									
Democracy [−1]	0.017		0.014	0.011	0.010	0.013	0.009	0.015	0.013
	(8.55)		(7.21)	(7.30)	(8.66)	(6.79)	(7.94)	(7.17)	(6.48)
Change in democracy	0.009		0.009			0.007	0.008	0.010	0.008
	(2.91)		(3.05)			(2.63)	(3.89)	(3.28)	(2.73)
Political color inline		0.005	0.017				0.012	0.012	0.013
		(2.16)	(4.46)				(4.68)	(3.19)	(3.68)
Rule of law		0.005							
		(2.89)							
Corruption		−0.007	0.006			0.004		0.007	0.006
		(−3.82)	(2.95)			(2.01)		(3.31)	(3.00)
Hypothesis 2: dependency on foreign support									
National capability	−6.175	−3.594	−8.179	−3.996	−4.331	−5.220	−4.795	−7.071	−8.438
	(−4.44)	(−3.77)	(−5.87)	(−3.23)	(−4.67)	(−4.06)	(−5.14)	(−4.93)	(−5.98)
Change in external debt		0.022							
		(1.86)							
Ethnic tension	0.005					0.004			
	(2.51)					(2.15)			
Inflation	0.000	0.000		0.000	0.000	0.000			
	(−1.97)	(−5.10)		(−2.97)	(−2.33)	(−4.04)			

Table B.1 (*Continued*)

	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7
Budget balance	−0.001		−0.001	−0.001	−0.001	−0.001		−0.001	−0.001
	(−3.28)		(−3.41)	(−4.31)	(−7.13)	(−3.22)		(−2.74)	(−3.25)
GDP per capita [−1]		−0.015			0.016		−0.027		
		(−1.73)			(2.89)		(−5.73)		
GDP growth							−0.001		
							(−4.82)		
Hypothesis 3: trade flows									
Exports from donor				0.049	0.023		0.009		
				(4.38)	(2.65)		(2.16)		
Imports of donor			0.065	0.018	0.055			0.028	0.018
			(2.53)	(1.87)	(5.65)			(4.26)	(4.35)
Net grants from donor		3640.41						0.028	0.018
		(2.49)						(4.26)	(4.35)
p-value Hausman test	0.05	0.17	0.01	0.12	0.10	0.10	0.01	0.04	0.01
Adj. R^2	0.92	0.92	0.93	0.87	0.92	0.90	0.85	0.93	0.93
Number of observations	1101	881	1143	2200	2155	1101	3376	1117	1106
Number of countries	96	71	101	130	128	96	157	99	99
Period	82–97	84–97	82–97	73–01	73–01	82–97	75–01	82–97	82–97

Notes: The dependent variable is the voting coincidence with the respective country or country group. Country- and time-specific effects are included in all regressions. T-statistics are shown in parentheses. To alleviate the interpretation of the estimated coefficients, level variables have been lagged by one period in case we allow both levels and first-differences to be included in the most extensive specification. None of the variables related to Hypotheses 4 is significant

Table B.2 Results for the baseline model, OLS

	CAN	FRA	GBR	DEU	ITA	JPN	USA	G6	G7
National capability	−6.986	−7.524	−7.877	−6.270	−7.059	−6.939	−9.691	−6.876	−7.941
	(−9.63)	(−11.30)	(−11.06)	(−7.10)	(−9.81)	(−9.94)	(−10.72)	(−9.08)	(−11.10)
Democracy [−1]	0.014	0.012	0.013	0.014	0.014	0.010	0.010	0.014	0.013
	(17.22)	(16.54)	(16.10)	(13.70)	(16.91)	(13.29)	(10.18)	(16.29)	(15.57)
p-value Hausman test	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj. R^2	0.85	0.89	0.89	0.86	0.87	0.82	0.81	0.89	0.89
Number of observations	4393	4393	4393	4393	4393	4393	4393	4393	4393
Number of countries	183	183	183	183	183	183	183	183	183
Period	73–01	73–01	73–01	73–01	73–01	73–01	73–01	73–01	73–01

Notes: The dependent variable is the voting coincidence with the respective country or country group. Country- and time-specific effects are included in all regressions. T-statistics are shown in parentheses

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